

ABSTRACT

**IMPROVED FIBER SUBSTRATE ADHESION AND COATINGS
BY CONTACT METATHESIS POLYMERIZATION**

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A method for bonding a material to a fibrous substrate surface that includes providing a catalyst at the fibrous substrate surface, then contacting that surface with a material that undergoes a metathesis reaction and then bonding the fibrous substrate surface to a second substrate. There are two embodiments of this method - a coating 10 process and an adhesive process. In the coating embodiment, the metathesizable material is contacted with the catalyst on the substrate surface so that it undergoes metathesis polymerization to form the coating. The adhesive process includes (a) providing a catalyst at the fibrous substrate surface, (b) contacting the catalyst on the fibrous substrate surface with a metathesizable material so that the metathesizable material undergoes a 15 metathesis reaction; and (c) contacting the fibrous substrate surface with a second substrate surface.